CONTENTS OF *FIELD CROPS RESEARCH*, VOLUME 24

VOL. 24 NOS. 1,2 AUGUST 1990

Response of contrasting vegetable-cowpea cultivars to plant density and harvesting of young green pods. I. Pod production
M.B. Kwapata and A.E. Hall (Riverside, CA, U.S.A.) 1
Response of contrasting vegetable-cowpea cultivars to plant density and harvesting of young green pods. II. Dry-matter production and photosynthesis
M.B. Kwapata, A.E. Hall and M.A. Madore (Riverside, CA, U.S.A.) 11
Determinants of cowpea (*Vigna unguiculata*) seed yield at extremely high plant density
M.B. Kwapata and A.E. Hall (Riverside, CA, U.S.A.) 23
Effects of crop proportion on intercropped upland rice and cowpea. 1. Grain yields
R.A. Morris (Manila, The Philippines), C. Siri-Udompas (Phattalung, Thailand) and H.S. Centeno (Manila, The Philippines) 33
Rice growth under different stubble and nitrogen-fertilization management techniques
P.E. Bacon and L.G. Lewin (Yanco, N.S.W., Australia) 51
Wheat recovery from drought stress at the tillering stage of development
A. Blum (Bet Dagan, Israel), S. Ramaiah, E.T. Kanemasu and G.M. Paulsen (Manhattan, KS, U.S.A.) 67
Development and evaluation of a sorghum model based on CERES-Maize in a semi-arid tropical environment
C.J. Birch (Lawes (Gatton), Qld., Australia), P.S. Carberry (Aitkenvale, Qld., Australia), R.C. Muchow (St. Lucia, Qld., Australia), R.L. McCown and J.N.G. Hargreaves (Aitkenvale, Qld., Australia) 87
Nutrient losses in eroded sediment from a limited-resource farm
T.L. Coleman, A.U. Eke, U.R. Bishnoi and C. Sabota (Normal, AL, U.S.A.) 105
Susceptibility to chilling of some central-African cultivars of *Coffea arabica*
H. Bauer, A. Comploj and M. Bodner (Innsbruck, Austria) 119
Effects of land-clearing method and soil management on crop production in the Amazon
J.C. Alegre, D.K. Cassel and D.E. Bandy (Raleigh, NC, U.S.A.) 131

Book Reviews
Simulating ecophysiological processes 143
Crop losses from air pollution 144
New crops for food and industry 148
Forage crop production 149
Respiration and productivity 150
The potato 152
Underground crops 154

Announcement 155

Guide for Authors 157

VOL. 24 NOS. 3,4 **OCTOBER 1990**

Nitrogen fixation and yield of cowpea (*Vigna unguiculata*) as influenced by cultivar and *Bradyrhizobium* strain
K.O. Awonaike (Ibadan, Nigeria), K.S. Kumarasinghe and S.K.A. Danso (Vienna, Austria) 163
Growth, nitrogen acumulation and partitioning, and N_2 fixation in faba bean (*Vicia faba* cv. Fiord) and pea (*Pisum* sativum cv. Early Dun)
Herdina and J.H. Silsbury (Glen Osmond, S.A., Australia) 173
Intergeneric hybridization in pigeonpea. II. Effect of cultivar on crossability and hybrid fertility
P. Sateesh Kumar (Hyderabad, India), N.C. Subrahmanyam and D.G. Faris (Patancheru, India) 189
Sequential elongation of internodes of deepwater rice at different water depths
P. Bekhasut, D.W. Puckridge, A. Wiengweera and T. Kupkanchanakul (Bangkok, Thailand) 195
Nitrogen accumulation and redistribution of late applications of ^{15}N-labelled fertilizer by wheat
C.J. Smith and D.M. Whitfield (Tatura, Vic., Australia) 211
Germination and elongation of the hypocotyl and radicle of kenaf (*Hibiscus cannabinus*) in response to temperature
P.S. Carberry and D.G. Abrecht (Aitkenvale, Qld., Australia) 227
Review of experimental design in a developing country: A case study from Jamaica
W.J. Fielding (Kingston, Jamaica) 241
Afternoon inhibition of photosynthesis in maize. 1. Evidence, and relationship to stand density
J.A. Bunce (Beltsville, MD, U.S.A.) 251
Afternoon inhibition of photosynthesis in maize. 2. Environmental causes and physiological symptoms
J.A. Bunce (Beltsville, MD, U.S.A.) 261
Contribution of pre-anthesis assimilates to grain-filling in irrigated and water-stressed sunflower crops. II. Estimates from a carbon budget
A.J. Hall (Parkville, Vic., Australia), D.M. Whitfield (Tatura, Vic., Australia) and D.J. Connor (Parkville, Vic., Australia) 273

Book Reviews
Intercropping 295
CO_2 and Global Change 296
Aphids 298

Author Index 301

Subject Index 305

Announcements 308

Contents of *Field Crops Research*, Volume 24 309